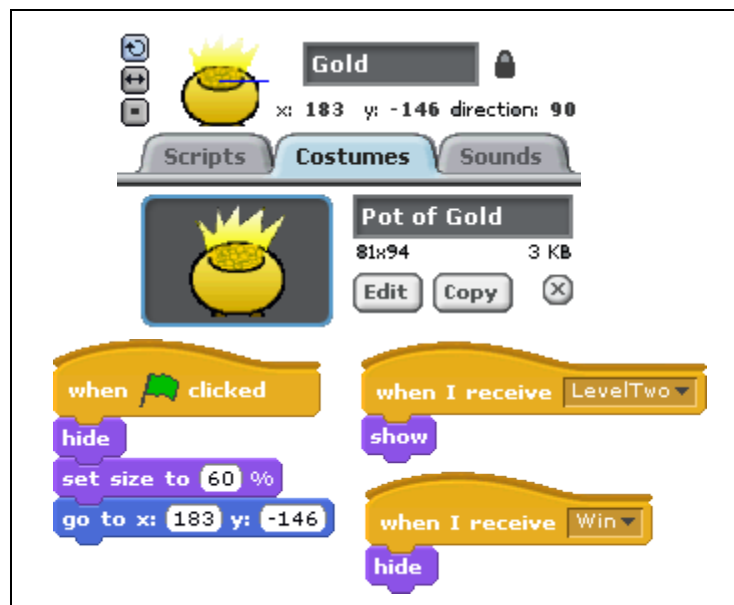
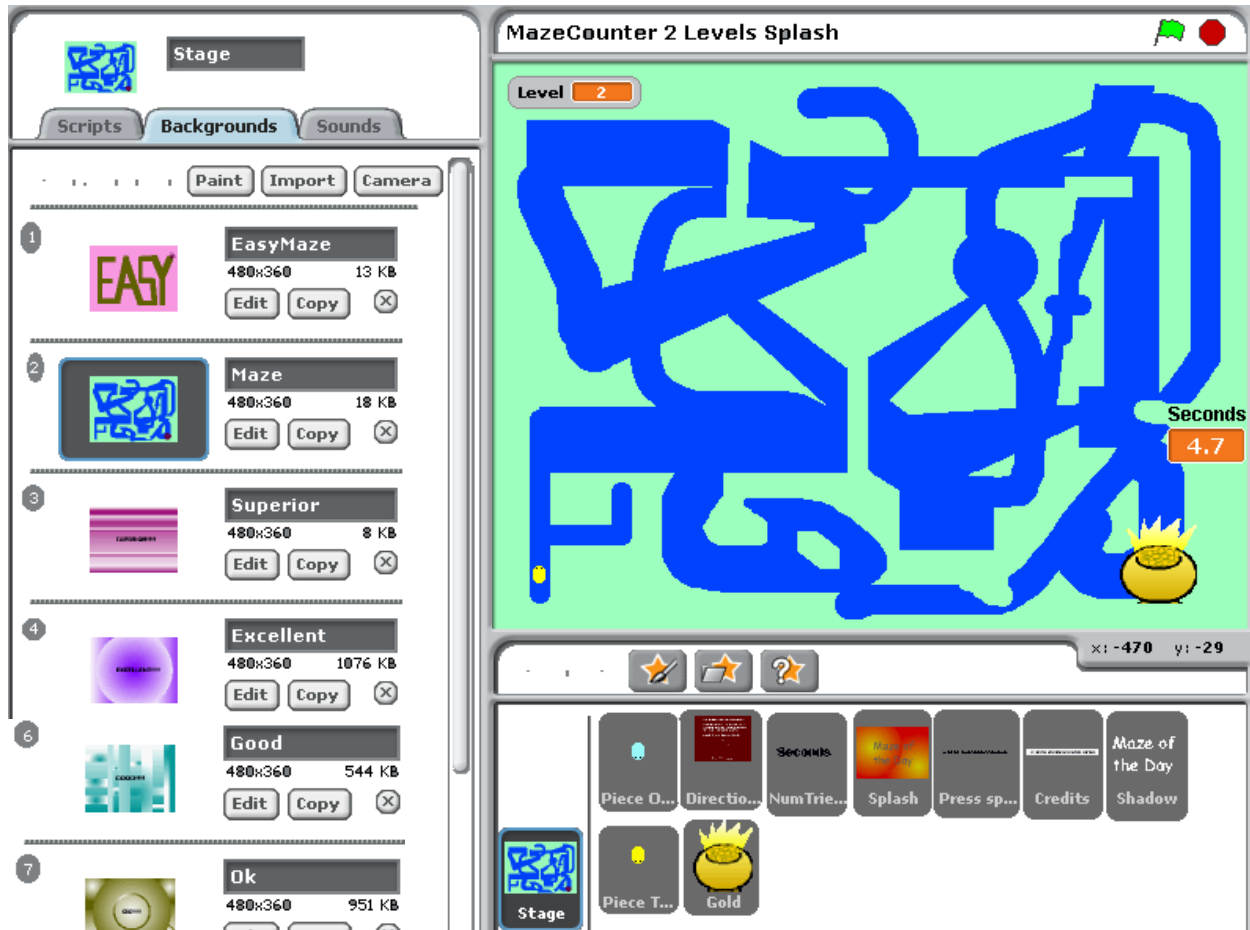


## *Maze of the Day in Scratch*



## Maze of the Day in Scratch

### Scripts and Comments for the Stage

**Script 1: Initialization**

```

when green flag clicked
  switch to background Maze Level One
  
```

When the green flag is clicked the Easy Maze background will appear.

**Script 2: Win Celebration (Nested IF ELSE)**

```

when I receive Win
  if Level = 1 and Count = 1 or Level = 2 and Time < 10
    switch to background Superior
  else
    if Level = 1 and Count = 2 or Level = 2 and Time < 20
      switch to background Excellent
    else
      if Level = 1 and Count = 3 or Level = 2 and Time < 30
        switch to background Great
      else
        if Level = 1 and Count = 4 or Level = 2 and Time < 40
          switch to background Good
        else
          if Level = 1 and Count = 5 or Level = 2 and Time < 50
            switch to background Ok
          else
            switch to background Finished
  
```

When the user has made the piece reach the goal, the Win message is broadcast by the Piece sprite. When the Win message is received by the stage, the appropriate celebration background will appear according to the number of tries that it took to get to the goal.

This is done with a series of NESTED IF ELSE structures. If the variable Count is equal to 1 then the Superior background is shown, otherwise if the variable Count is equal to 2 then the Excellent background is shown and so on until by process of elimination if 6 or more tries were necessary it will switch the background to Finished.

**Script 3: Win Celebration (Wait and Broadcast)**

```

when I receive Win
  wait 5 secs
  if Level = 1
    broadcast LevelTwo
  else
    broadcast Credits
  switch to background End
  
```

When the message Win (that was broadcast by the Piece script) is received by the stage script, there will be a 5 second wait for the user to look at the celebration screen. Then if the variable Level is equal to Easy then a message will be broadcast to the entire program to say it is time to switch to Level Two. But if the Level is not equal to Easy, that indicates that this win must be a win at level two so the ending background is shown, since there are only 2 levels.

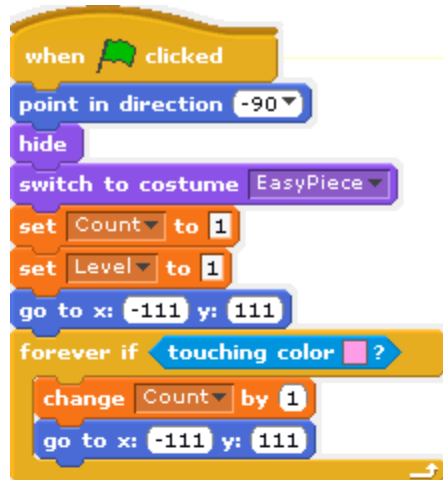
**Script 4: Level Transition**

```

when I receive LevelTwo
  switch to background Maze Level Two
  
```

When the message Level Two is received the background switches to the level two maze.

## Maze of the Day in Scratch

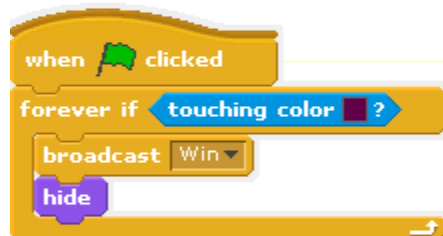


The piece will start at a designated point.

The variable Count is set to 1 and the variable Level is set to Easy.

The piece is put at the appropriate starting location.

The program will constantly check if the piece is moved off the path. If it is, the count variable will go up by 1 and the piece will go back to the beginning to start the next try.



If the piece touches the target which is a certain color, a message is sent to the rest of the scripts, so the appropriate scripts for the background will be activated.



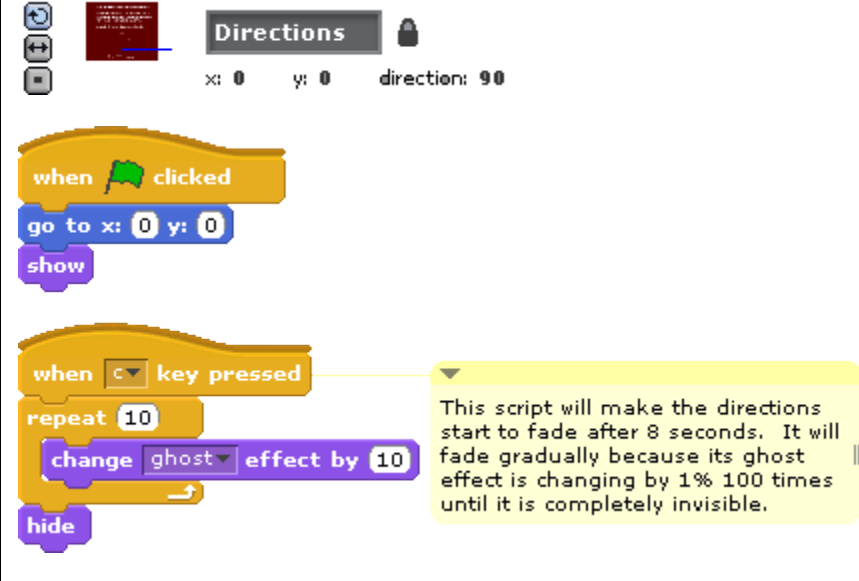
The direction of the piece will change according to the arrow key used, and it will move 5 steps in that direction.



All 4 arrow keys will work.



## Maze of the Day in Scratch

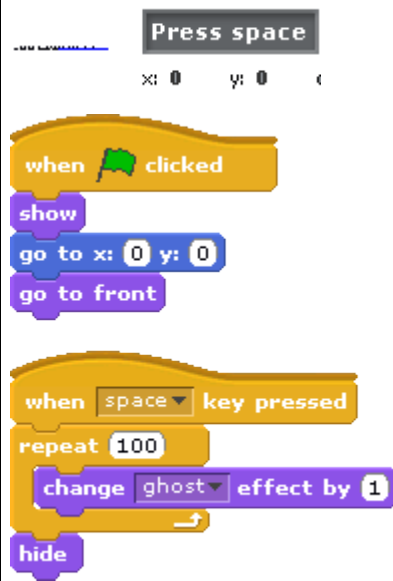


**Directions**  
x: 0 y: 0 direction: 90

when clicked  
go to x: 0 y: 0  
show

when c key pressed  
repeat 10  
change ghost effect by 10  
hide

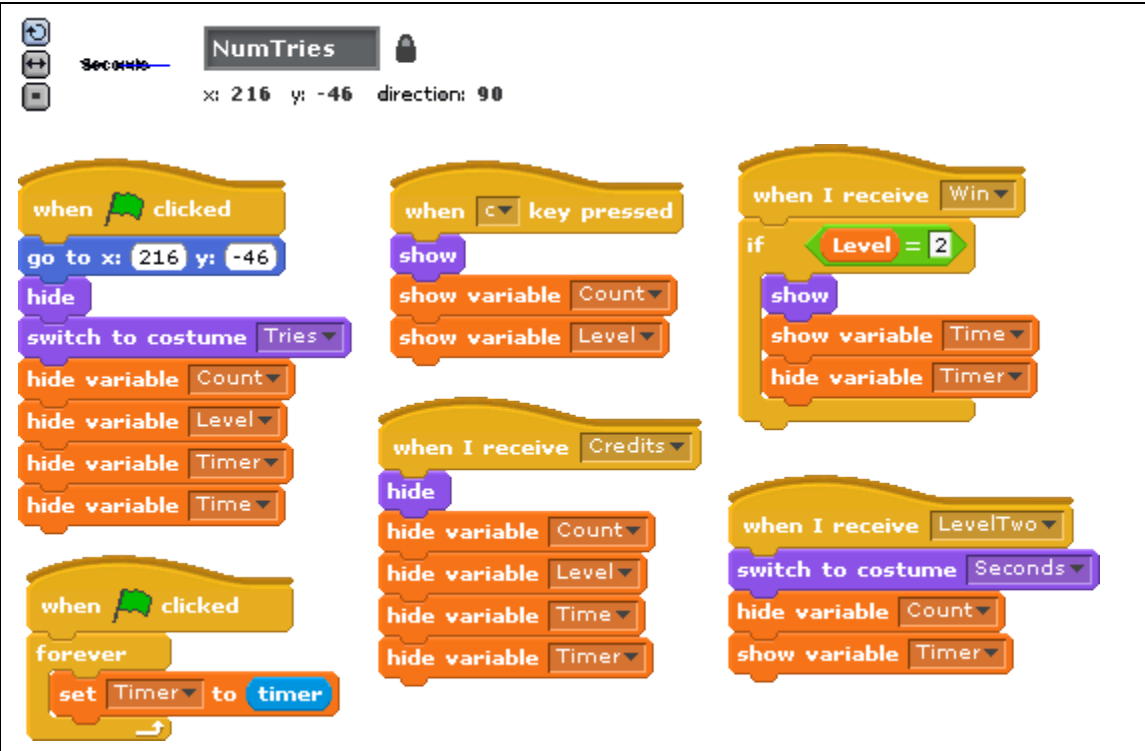
This script will make the directions start to fade after 8 seconds. It will fade gradually because its ghost effect is changing by 1% 100 times until it is completely invisible.



**Press space**  
x: 0 y: 0

when clicked  
show  
go to x: 0 y: 0  
go to front

when space key pressed  
repeat 100  
change ghost effect by 1  
hide



**NumTries**  
x: 216 y: -46 direction: 90

when clicked  
go to x: 216 y: -46  
hide  
switch to costume Tries  
hide variable Count  
hide variable Level  
hide variable Timer  
hide variable Time

when c key pressed  
show  
show variable Count  
show variable Level

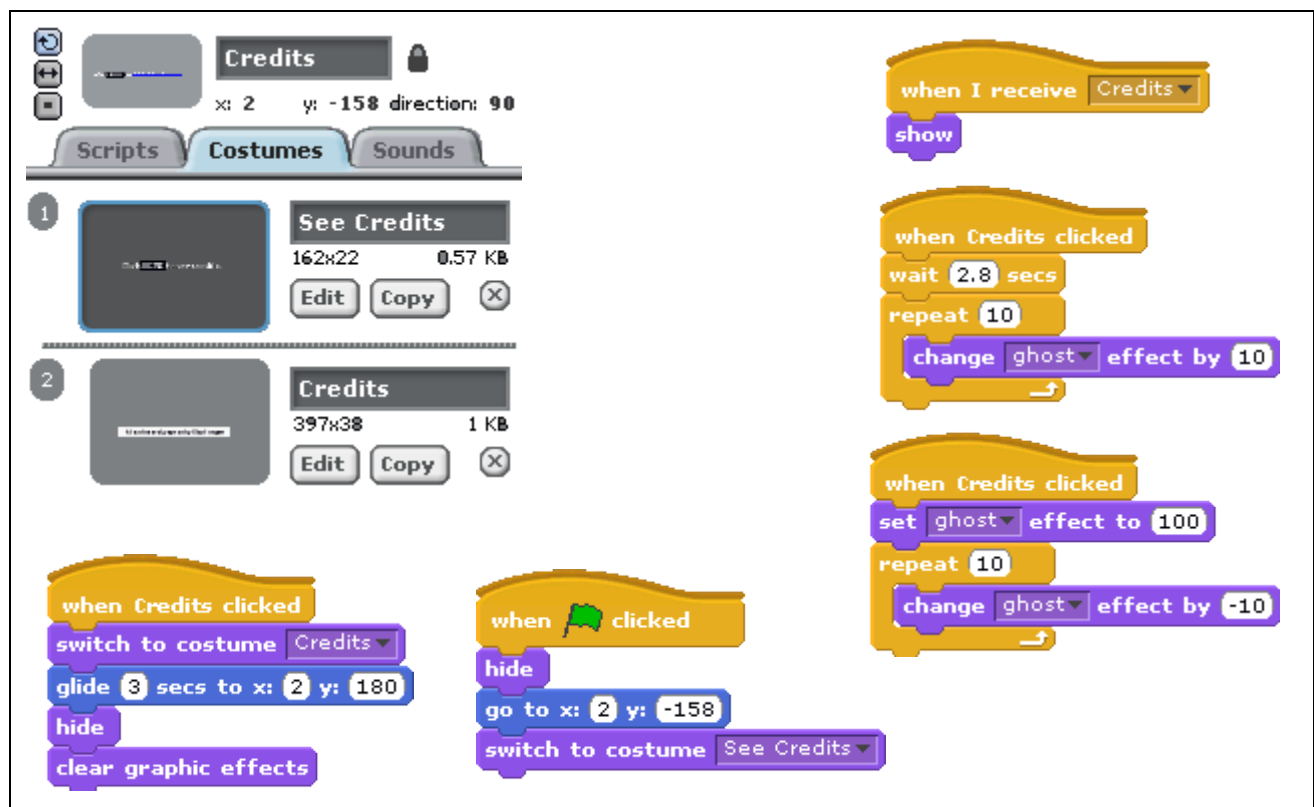
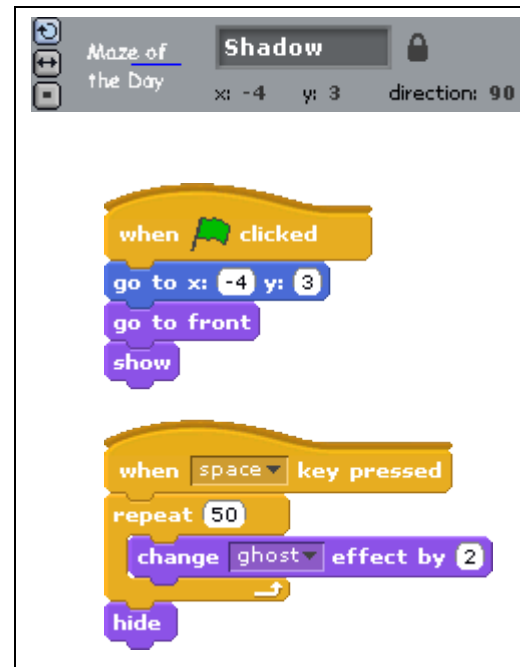
when I receive Win  
if Level = 2  
show  
show variable Time  
hide variable Timer

when I receive Credits  
hide  
hide variable Count  
hide variable Level  
hide variable Time  
hide variable Timer

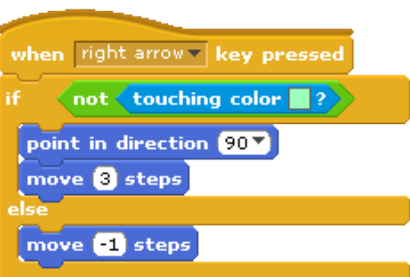
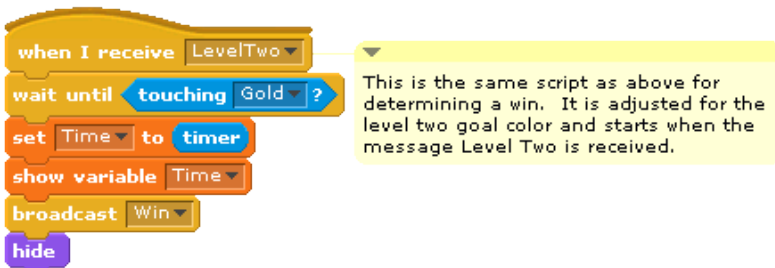
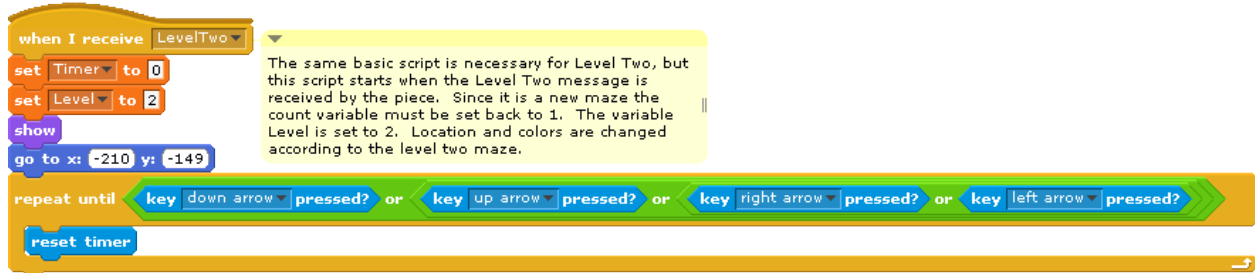
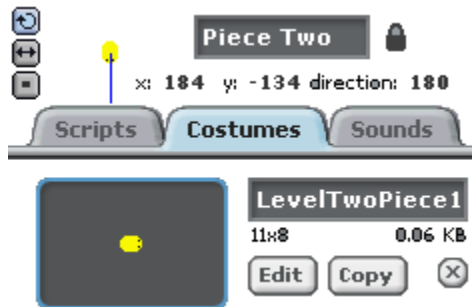
when I receive LevelTwo  
switch to costume Seconds  
hide variable Count  
show variable Timer

when clicked  
forever  
set Timer to timer

## Maze of the Day in Scratch



## Maze of the Day in Scratch

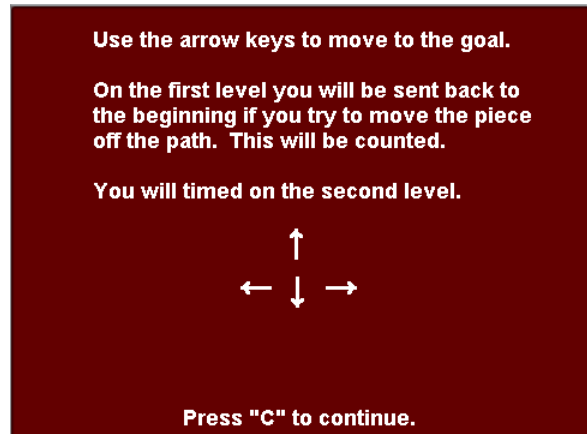


## *Maze of the Day in Scratch*

Opening Splash Title Page



Directions



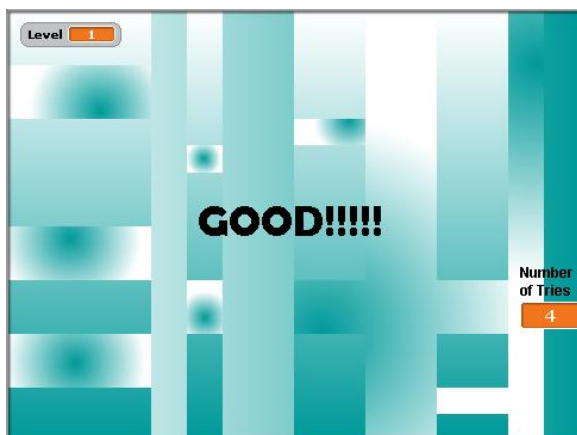
First Level of Maze with Piece at Start



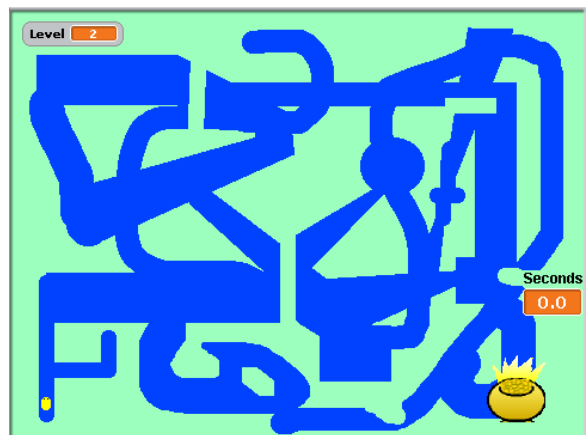
The piece is on its 4<sup>th</sup> attempt.



Good is the celebration reaching the goal in 4 tries.

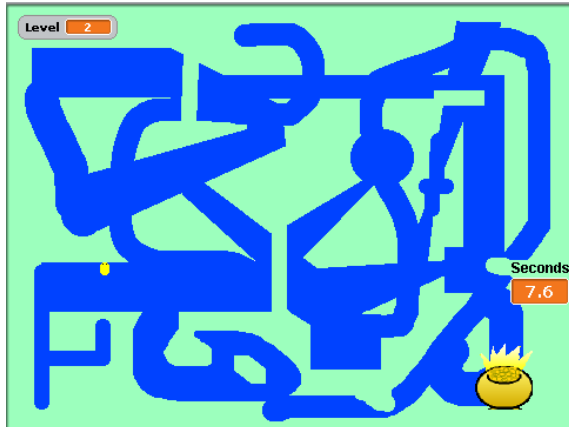


Harder level maze is timed.



## *Maze of the Day in Scratch*

Level 2 maze piece gets stuck at edge of path.



56.5 seconds is no cause for celebration.



Closing Comments



Credits scroll up the page.



Superior is the rating for getting to the goal in 1 try for level 1 or under 10 seconds for level 2.



Excellent is for 2 tries or under 20 seconds.

